Monthly Oversight Report 47
ACS NPL Site
Griffith, Indiana
November 1 - 26, 2004

BLACK & VEATCH

101 N. Wacker Drive
Suite 1100
Chicago, Illinois 60606-7302

Tel: (312) 346-3775
Fax: (312) 346-4781

Black & Veatch Special Projects Corp.

USEPA/RAC VII
American Chemical Services RAO (057-ROBF-05J7)

BVSPC Project 46526
BVSPC File C.3
December 15, 2004

Mr. Kevin Adler
U.S. Environmental Protection Agency
77 W. Jackson Boulevard (SR-6J)
Chicago, Illinois 60604-3590

Subject: Monthly Oversight Summary Report
No. 47 for November 2004

Dear Mr. Adler:

Enclosed is the Monthly Oversight Summary Report No. 47 for November 2004 for the American Chemical Services Superfund Site in Griffith, Indiana.

If you have any questions, please call (312-683-7856) or email (campbelllm@bv.com).

Sincerely,

BLACK & VEATCH Special Projects Corp.

Larry M. Campbell, P.E.
Site Manager

Enclosure

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Monthly Oversight Summary Report No. 47
ACS Superfund Site WA57, 46526.238

Reporting Period: Month of November (November 1 - 26, 2004).
BVSPC O/S Dates: November 1, 8, and 18, 2004. 2004.

Personnel Summary Affiliation	No. of Personnel	Responsibility
Montgomery Watson Harza	3	Respondent's General Contractor
Black & Veatch Special Projects Corp.	1	USEPA Oversight Contractor
Austgen	1	General Contractor
Environmental Field Services	3	Geoprobe Contractor
Walsh & Kelly	2	SBPA Asphalt Paving Contractor
Insulation Concepts	2	Insulation Contractor
Mompar Insulation	2	Insulation Contractor
Microbac (formerly Simalabs)	1	GWTP Sampling Contractor

Construction Activities

Major Activities:

- Montgomery Watson Harza continued operating the groundwater treatment plant and the in-situ soil vapor extraction systems.
- Montgomery Watson Harza completed installation of and started the Off-Site Containment Area auxiliary soil vapor blower.
- Montgomery Watson Harza and Environmental Field Services began the lower aquifer investigation, but discontinued it because of unexpected subsurface conditions.
- Montgomery Watson Harza and Environmental Field Services installed replacement piezometers P93 and P94.
- Montgomery Watson Harza responded to hazardous waste deficiencies identified by the Indiana Department of Environmental Management.
- Insulation Concepts insulated the new knockout tank and associated piping at the groundwater treatment plant.
- Mompar Insulation insulated the recently installed auxiliary blower shed.
- Microbac (formerly Simalabs) collected samples from the groundwater treatment plant for routine process monitoring.
- Montgomery Watson Harza held a construction coordination meeting at the site on November 18, 2004.

Activities Performed:

Montgomery Watson Harza (MWH) continued to operate the groundwater treatment plant (GWTP) during the reporting period at 20 to 25 gpm. The GWTP was shut down for isolated periods for routine maintenance. Because of problems with the pump controller, groundwater was not being pumped and treated from extraction well MW10C since the previous reporting period. The pump controller was repaired and pumping from MW10C was resumed in early November. MWH reported that the Perimeter Groundwater Containment System (PGCS) was shutdown for safety reasons during the period November 1 through 9 because of the lower aquifer investigation that was conducted in the area of the PGCS. MWH reported that the GWTP flow was reduced from normal during a few days in mid November because of the failure of primary process pump P-104; this pump has been repaired and the flow returned to normal. MWH reported that the GWTP shut down following a power failure on the evening of November 25. The plant was brought back online on November 27. Microbac (formerly Simalabs) collected samples from the GWTP for routine process monitoring.

MWH continued to operate the On-Site Containment Area (ONCA) Still Bottoms Pond Area (SBPA) and Off-Site Containment Area (OFCA) in-situ soil vapor extraction (ISVE) systems, processing vapors through thermal oxidizers 1 and 2. Vapors from the ONCA SBPA ISVE system were processed through thermal oxidizer 1 (thermox 1), and those from the OFCA ISVE system were processed through thermox 2. The ISVE systems were down because of the power outage during the period November 25 - 27.

The OFCA ISVE system continues to operate with 14 wells. Austgen completed installing the explosion proof relays and started the OFCA auxiliary blower on November 4. MWH reported that it activated an additional 14 SVE wells in the OFCA ISVE system on November 24, bringing the total number of wells being used in the OFCA to 28. The recently activated wells are SVE-1, 7, 8, 9, 14, 15, 18, 21, 27, 30, 31, 33, 36, and 37. Flow was confirmed in 11 of the newly activated wells, but not so in 3 others. The two blowers in the OFCA ISVE system are currently operating at 2,000 cubic feet per minute (cfm) back to thermox 2.

The ONCA SBPA ISVE system continues to operate (at 1,000 cfm) with the same group of 12 wells that it has used for a few months. MWH reported that significant flow was observed in only five of these activated wells. MWH reported that the groundwater levels in some wells are higher than previously, possibly influencing the reduced flow in some wells. MWH reported that the SBPA ISVE system is operating with zero ambient air. MWH is considering activating more or a different pattern of SVE wells. MWH reported that it has not pumped product from the ONCA SBPA ISVE wells for a few months. MWH will prepare a product removal pumping plan/schedule.

Environmental Field Services (EFS) mobilized to the site on November 1 with hollow-stem auger (HSA) and geoprobe [direct-push technology (DPT)] drill rigs to conduct the lower aquifer investigation. Observed MWH conduct the kickoff health and safety training of EFS personnel. Observed EFS drilling with HSA rig to install the surface casing in the seven easternmost well locations for the lower aquifer investigation. MWH reported that EFS could not access the three westernmost well locations because of soft, muddy ground surface.

MWH reported finding a second clay layer about 3 feet below the known clay layer that separates the upper and lower aquifers. MWH also reported observing ether odors in the upper aquifer sand, in both clay layers, and in the intermediate sand. Analytical results from soil samples sent for expedited analytical analysis confirmed benzene concentrations as high as 3,000 parts per billion (ppb). MWH reported that it was not drilling deeper into the lower aquifer for fear of contaminating the lower aquifer with upper aquifer contaminants. Accordingly, MWH discontinued the lower aquifer investigation and demobilized EFS on November 9. MWH plans to document the existing lower aquifer investigation data, analyze these data, and prepare a proposal for continuation of the lower aquifer investigation.

Observed MWH and EFS install piezometers P93 and P94 on November 1 to replace those that had previously been destroyed. P93 was installed inside the barrier wall, and P94, outside, to monitor water level differential across the barrier wall.

MWH reported that about 1 gallon of an oily product "bubbled" out of ONCA SBPA ISVE well 83 and spilled onto the asphalt cap on October 29. Austgen shut off the ONCA SBPA ISVE system and cleaned up the spilled product and attempted to identify the cause of this occurrence. The ISVE system was subsequently restarted and there has not be a recurrence of this event. Spilled product was thick and did not flow more than a few feet from the well.

MWH also reported that on October 29, Mr. Rob Malone of the Indiana Department of Environmental Management was onsite and inspected the GWTP and identified some deficiencies: some filter cake had fallen onto the floor from the sludge rolloff box, the sludge rolloff box did not contain the date for start of collection, and a used oil storage drum was not labeled as such. MWH reported that it had corrected these deficiencies and had orally reported this to Mr. Malone via telephone on November 1.

MWH reported that it has not pumped product from the ONCA SBPA ISVE wells for a few months. MWH will prepare a product removal pumping plan/schedule.

MWH reported that it planned to pour cement grout into the bases of the yellow chain fence stanchions to increase their stability.

MWH reported that Walsh & Kelly was onsite on November 12 to make some measurements of the SBPA final cover to complete its deliverables. MWH reported that it had received final deliverables from Walsh & Kelly regarding the ONCA SBPA final cover and expects to complete the construction completion report and submit a draft to the agencies in late December or January.

MWH reported that Insulation Concepts was onsite on November 17 to insulate the recently installed knockout tank and associated piping near the thermox 1 heat exchanger at the GWTP.

MWH reported that Mompar Insulation was onsite on November 23 to insulate the recently installed auxiliary blower shed.

MWH held a construction coordination meeting at the site on November 18, 2004.

Attached are Black & Veatch Special Projects Corp. (BVSPC) weekly reports No. 192 through 195, correspondence, log book notes, and photographs of the daily activities. BVSPC's crew conducted oversight of the major field activities on portions of 3 days (November 1, 8, and 18, 2004). BVSPC's crew attended a construction coordination meeting on November 18.

Topics of Concern: None

Concern Resolution: None

Upcoming Activities:

- MWH to continue proving out the ONCA SBPA ISVE system wells.
- MWH to continue operating the GWTP and the OFCA and ONCA SBPA ISVE systems.
- MWH to assess results of final laboratory testing of cores of the SBPA final asphalt cover.
- MWH to complete fencing of the SBPA final cover.
- MWH to collect additional soil gas samples to assess possible soil vapor intrusion into the house basement resulting from the smear zone in the South Area plume.
- MWH to reassess its approach to completing the lower aquifer investigation.
- MWH to contact local resident regarding "whining" noise from the treatment system.
- MWH to measure site water levels onsite and in monitoring wells.

Signature: Larry Campbell Date: December 15, 2004

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Weekly Oversight Summary Report No. 192
ACS Superfund Site WA57, 46526.238

Reporting Period: Week of November 1, 2004.
BVSPC O/S Dates: November 1, 2004 (Mr. Campbell)

Personnel Summary Affiliation	No. of Personnel	Responsibility
Montgomery Watson Harza	3	Respondent's General Contractor
Black & Veatch Special Projects Corp.	1	USEPA Oversight Contractor
Austgen	1	General Contractor
Environmental Field Services	4	Geoprobe Contractor

Construction Activities

Major Activities:

- Montgomery Watson Harza continued operating the groundwater treatment plant and the in-situ soil vapor extraction systems.
- Montgomery Watson Harza completed installation of and started the Offsite Containment Area auxiliary soil vapor blower.
- Montgomery Watson Harza and Environmental Field Services began the lower aquifer investigation.
- Montgomery Watson Harza and Environmental Field Services installed replacement piezometers P93 and P94.
- Montgomery Watson Harza responded to hazardous waste deficiencies identified by the Indiana Department of Environmental Management.

Activities Performed:

Montgomery Watson Harza (MWH) reported that it continued to operate the groundwater treatment plant (GWTP) at 25 gpm. The GWTP was shut down periodically for routine maintenance. MWH reported that the pump controller for extraction well MW10C has been repaired and reinstalled this week and water from MW10C is being pumped to the GWTP. MWH also reported that the Perimeter Groundwater Containment System (PGCS) was shutdown for safety reasons because of the lower aquifer investigation being conducted in the area of the PGCS.

MWH continued to operate the On-Site Containment Area (ONCA) Still Bottoms Pond Area (SBPA) and Off-Site Containment Area (OFCA) in-situ soil vapor extraction (ISVE) systems, processing vapors through thermal oxidizers 1 and 2. Vapors from the ONCA SBPA ISVE system were processed through thermal oxidizer 1 (thermox 1) and those from the OFCA ISVE system were processed through thermox 2.

The OFCA ISVE system continues to operate with 14 wells. Austgen completed installing the explosion proof relays and started the OFCA auxiliary blower on November 4. The two blowers in

the OFCA ISVE system are currently operating at 2,000 cubic feet per minute (cfm) back to thermox 2. The ONCA SBPA ISVE system continues to operate with a different group of 12 wells that may produce more vapors than the previous group.

Environmental Field Services (EFS) mobilized to the site on November 1 with hollow-stem auger (HSA) and geoprobe [direct-push technology (DPT)] drill rigs to conduct the lower aquifer investigation. Observed MWH conduct the kickoff health and safety training of EFS personnel. Observed EFS drilling with HSA rig to install the surface casing in the seven eastern-most well locations for the lower aquifer investigation. MWH reported that EFS could not access the three westernmost well locations because of soft, muddy ground surface.

MWH reported finding a second clay layer about 3 feet below the known clay layer that separates the upper and lower aquifers. MWH also reported observing ether odors in the upper aquifer sand, in both clay layers, and in the intermediate sand. MWH reported that it was not drilling deeper into the lower aquifer for fear of contaminating the lower aquifer with upper aquifer contaminants. MWH sent some soil samples for chemical analytical analysis on an expedited turnaround basis to confirm ether concentrations.

Observed MWH and EFS install piezometers P93 and P94 on November 1 to replace those that had previously been destroyed. P93 was installed inside the barrier wall, and P94, outside, to monitor water level differential across the barrier wall.

MWH reported that an oily product "bubbled" out of ONCA SBPA ISVE well 83 and spilled onto the asphalt cap on October 29. Austgen shut off the ONCA SBPA ISVE system and cleaned up the spilled product and attempted to identify the cause of this occurrence. The ISVE system was subsequently restarted and there has not be a recurrence of this event. Spilled product was thick and did not flow more than a few feet from the well.

MWH also reported that on October 29, Mr. Rob Malone of the Indiana Department of Environmental Management was onsite and inspected the GWTP and identified some deficiencies: some filter cake had fallen onto the floor from the sludge rolloff box, the sludge rolloff box did not contain the date for start of collection, and a used oil storage drum was not labeled as such. MWH reported that it had corrected these deficiencies and had orally reported this to Mr. Malone via telephone on November 1.

Topics of Concern: None.

Concern Resolution: None.

Upcoming Activities:

- MWH to continue proving out the ONCA SBPA ISVE system wells.
- MWH to continue operating the GWTP and the OFCA and ONCA SBPA ISVE systems.
- MWH to assess results of final laboratory testing of cores of the SBPA final asphalt cover.
- MWH to complete fencing of the SBPA final cover.
- MWH to collect additional soil gas samples to assess possible soil vapor intrusion into the house basement resulting from the smear zone in the South Area plume.

- MWH to continue the lower aquifer investigation.
- MWH to contact local resident regarding "whining" noise from the treatment system.

Signature: Larry Campbell Date: November 9, 2004

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Weekly Oversight Summary Report No. 193
ACS Superfund Site WA57, 46526.238

Reporting Period: Week of November 8, 2004.
BVSPC O/S Dates: November 8, 2004 (Mr. Campbell)

Personnel Summary Affiliation	No. of Personnel	Responsibility
Montgomery Watson Harza	3	Respondent's General Contractor
Black & Veatch Special Projects Corp.	1	USEPA Oversight Contractor
Austgen	1	General Contractor
Walsh & Kelly	2	SBPA Asphalt Paving Contractor
Environmental Field Services	2	Geoprobe Contractor

Construction Activities

Major Activities:

- Montgomery Watson Harza continued operating the groundwater treatment plant and the in-situ soil vapor extraction systems.
- Montgomery Watson Harza and Environmental Field Services continued the lower aquifer investigation, but discontinued it because of unexpected subsurface conditions.

Activities Performed:

Montgomery Watson Harza (MWH) reported that it continued to operate the groundwater treatment plant (GWTP) at 25 gpm. The GWTP was shut down periodically for routine maintenance. MWH reported that the Perimeter Groundwater Containment System (PGCS) was shutdown for safety reasons because of the lower aquifer investigation being conducted in the area of the PGCS.

MWH continued to operate the On-Site Containment Area (ONCA) Still Bottoms Pond Area (SBPA) and Off-Site Containment Area (OFCA) in-situ soil vapor extraction (ISVE) systems, processing vapors through thermal oxidizers 1 and 2. Vapors from the ONCA SBPA ISVE system were processed through thermal oxidizer 1 (thermox 1) and those from the OFCA ISVE system were processed through thermox 2.

The OFCA ISVE system continues to operate with 14 wells. The two blowers in the OFCA ISVE system are currently operating at 2,000 cubic feet per minute (cfm) back to thermox 2. The ONCA SBPA ISVE system continues to operate (at 1,000 cfm) with a different group of 12 wells that may produce more vapors than the previous group.
Environmental Field Services (EFS) continued the lower aquifer investigation using a geoprobe [direct-push technology (DPT)] rig. MWH reported that it continued to find a second clay layer about 3 feet below the know clay layer that separates the upper and lower aquifers. MWH also

reported observing ether odors in the upper aquifer sand, in both clay layers, and in the intermediate sand. Analytical results from soil samples sent for expedited analytical analysis confirmed benzene concentrations as high as 3,000 parts per billion (ppb). MWH reported that it was not drilling deeper into the lower aquifer for fear of contaminating the lower aquifer with upper aquifer contaminants. Accordingly, MWH discontinued the lower aquifer investigation and demobilized EFS on November 9. MWH plans to document the existing lower aquifer investigation data, analyze these data, and prepare a proposal for continuation of the lower aquifer investigation.

MWH reported that Walsh & Kelly was onsite on November 12 to make some measurements of the SBPA final cover to complete its deliverables.

MWH reported that the oily product that had "bubbled" out of ONCA SBPA ISVE well 83 and spilled onto the asphalt cap on October 29 was about 1 gallon in volume. MWH was not able to recreate this occurrence.

Topics of Concern: None.

Concern Resolution: None.

Upcoming Activities:

- MWH to continue proving out the ONCA SBPA ISVE system wells.
- MWH to continue operating the GWTP and the OFCA and ONCA SBPA ISVE systems.
- MWH to assess results of final laboratory testing of cores of the SBPA final asphalt cover.
- MWH to complete fencing of the SBPA final cover.
- MWH to collect additional soil gas samples to assess possible soil vapor intrusion into the house basement resulting from the smear zone in the South Area plume.
- MWH to reassess its approach to completing the lower aquifer investigation.
- MWH to contact local resident regarding "whining" noise from the treatment system.

Signature: Larry Campbell Date: November 17, 2004

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Weekly Oversight Summary Report No. 194
ACS Superfund Site WA57, 46526.238

Reporting Period: Week of November 15, 2004.
BVSPC O/S Dates: November 18, 2004 (Mr. Campbell)

Personnel Summary Affiliation	No. of Personnel	Responsibility
Montgomery Watson Harza	3	Respondent's General Contractor
Black & Veatch Special Projects Corp.	1	USEPA Oversight Contractor
Austgen	1	General Contractor
Insulation Concepts	2	Insulation Contractor
Environmental Field Services	2	Geoprobe Contractor

Construction Activities

Major Activities:

- Montgomery Watson Harza continued operating the groundwater treatment plant and the in-situ soil vapor extraction systems.
- Insulation Concepts insulated the new knockout tank and associated piping at the groundwater treatment plant.
- Montgomery Watson Harza conducted the construction coordination meeting on November 18.

Activities Performed:

Montgomery Watson Harza (MWH) reported that it continued to operate the groundwater treatment plant (GWTP) at 20 gpm, reduced from normal because of the failure of primary process pump P-104. The GWTP was shut down periodically for routine maintenance. MWH reported that groundwater was again being pumped from the Perimeter Groundwater Containment System (PGCS) since the lower aquifer investigation was stopped last week.

MWH continued to operate the On-Site Containment Area (ONCA) Still Bottoms Pond Area (SBPA) and Off-Site Containment Area (OFCA) in-situ soil vapor extraction (ISVE) systems, processing vapors through thermal oxidizers 1 and 2. Vapors from the ONCA SBPA ISVE system were processed through thermal oxidizer 1 (thermox 1) and those from the OFCA ISVE system were processed through thermox 2.

The OFCA ISVE system continues to operate with 14 wells. The two blowers in the OFCA ISVE system are currently operating at 2,000 cubic feet per minute (cfm) back to thermox 2. The ONCA SBPA ISVE system continues to operate (at 1,000 cfm) with a different group of 12 wells that may produce more vapors than the previous group.

MWH reported that it has not pumped product from the ONCA SBPA ISVE wells for a few months. MWH will prepare a product removal pumping plan/schedule.

MWH reported that it planned to pour cement grout into the bases of the yellow chain fence stanchions to increase their stability.

MWH reported that it had received final deliverables from Walsh & Kelly regarding the ONCA SBPA final cover and expects to complete the construction completion report and submit a draft to the agencies in late December or January.

MWH reported that Insulation Concepts was onsite on November 17 to insulate the recently installed knockout tank and associated piping near the thermox 1 heat exchanger at the GWTP.

Montgomery Watson Harza held a construction coordination meeting at the site on November 18, 2004. Black & Veatch Special Project Corp. attended this construction coordination meeting.

Topics of Concern: None.

Concern Resolution: None.

Upcoming Activities:

- MWH to continue proving out the ONCA SBPA ISVE system wells.
- MWH to continue operating the GWTP and the OFCA and ONCA SBPA ISVE systems.
- MWH to assess results of final laboratory testing of cores of the SBPA final asphalt cover.
- MWH to complete fencing of the SBPA final cover.
- MWH to collect additional soil gas samples to assess possible soil vapor intrusion into the house basement resulting from the smear zone in the South Area plume.
- MWH to reassess its approach to completing the lower aquifer investigation.
- MWH to contact local resident regarding "whining" noise from the treatment system.

Signature: Larry Campbell Date: November 24, 2004

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WEEKLY CONSTRUCTION MEETING MINUTES FOR NOVEMBER 18, 2004 MEETING AMERICAN CHEMICAL SERVICE, NPL SITE GRIFFITH, INDIANA

MEETING DATE: Thursday, November 18, 2004

MEETING TIME: 10:00 AM

MEETING LOCATION: MWH Chicago Office

ATTENDEES:
Larry Campbell – BVSPC
Lee Orosz – MWH
Rob Adams – MWH (via telephone)
Kevin Adler – U.S. EPA (via telephone)
Chad Smith – MWH (via telephone)
Peter Vagt – MWH (via telephone)

TOPICS

Health and Safety Summary
There have been no health and safety issues since the last meeting on October 28th.

Rob Malone from IDEM visited the site on October 29th after an inspection of the ACS facility. Mr. Malone inspected the site and provided the following comments: the filter cake that had fallen on the floor should be cleaned up, the roll-off box should be marked with the first and last load dates, and the used oil storage can should be labeled with "Oil". Lee Orosz had a follow-up telephone call with Mr. Malone on November 1st to state that these items had been addressed.

Groundwater Treatment Plant (GWTP) Status
The GWTP is presently operating at 20 gallons per minute (gpm). This flowrate is less than normal due to failure of one of the primary process pumps (P-104). The GWTP influent flowrate will be increased once the pump is replaced.

The pumps in extraction well MW56 and MW10C are currently on line.

Off-Site Area/SBPA ISVE Systems
The expansion equipment for the Off-Site ISVE system was brought on line on November 4th and the Off-Site ISVR system is currently operating with a vapor collection rate of approximately 2,000 cubic feet per minute (CFM). There were no changes in the Off-Site or SBPA ISVE system wells.

Both thermal oxidizer/scrubber units are currently operating and did not have any operational problems during the three weeks since the last meeting. Thermal Oxidizer/Scrubber Unit 2 (Therm Ox 2) is currently treating 2,000 CFM of vapors from the Off-Site ISVE system and Thermal Oxidizer/Scrubber Unit 1 (Therm Ox 1) is currently treating 1,000 CFM of vapors from the SBPA ISVE system.

SBPA Final Cover

As a correction to the minutes from the October 28th meeting, the traffic stripes were added to the SBPA Final Cover on October 21; not October 11 as had been noted.

MWH is planning to pour concrete into the base of the yellow fence posts currently on the SBPA cover to add stability and provide a stronger fencing system. MWH continues to evaluate the potential to expand the extents of the fence limits.

Site Winterization

Insulation Concepts was on site on November 17th to apply spray insulation to the new knockout tank and miscellaneous exterior piping around the Site. The planned winterization activities have also been completed.

Lower Aquifer Investigation

MWH conducted Phase 1 of the Lower Aquifer Groundwater Investigation from November 1st through November 9th. Due to unexpected conditions, the drilling protocols scoped for the work were not adequate to isolate the upper aquifer impacts from the lower aquifer. Therefore, not all of the work detailed in the Work Plan could be completed. MWH will report on the findings from the completed investigation and develop an alternate approach for investigating the potential VOCs in the lower aquifer.

Chemical Oxidation Treatment

MWH should receive results soon for the second post-application sampling round, which was conducted from October 25th through October 27th, approximately four weeks after the first Full-Scale Chem-Ox application. MWH is currently preparing a proposal to address potential soil vapor concerns at the Reder Road / Colfax Avenue intersection.

Groundwater and Residential Well Sampling

MWH is currently validating results from the groundwater sampling activities completed in September 2004.

Look Ahead Schedule

November 19, 2004 through December 9, 2004	• Operate and maintain the GWTP/BWES/PGCS (on-going) • Operate and maintain the ISVE (on-going) • Collect site water levels (Mid-December) • Install heat tracing on the new knock-out tank
Health and Safety Items to Monitor	▪ Routine daily tailgate health and safety meetings for all work activities.

Next Construction Meeting – Thursday, December 9, 2004, 10 AM.

RAA/CAS/PJV
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Weekly Oversight Summary Report No. 195
ACS Superfund Site WA57, 46526.238

Reporting Period: Week of November 22, 2004.
BVSPC O/S Dates: Cancelled because of limited site activities.

Personnel Summary Affiliation	No. of Personnel	Responsibility
Montgomery Watson Harza	1	Respondent's General Contractor
Austgen	1	General Contractor
Mompar Insulation	2	Insulation Contractor

Construction Activities

Major Activities:

- Montgomery Watson Harza continued operating the groundwater treatment plant and the in-situ soil vapor extraction systems.
- Mompar Insulation insulated the recently installed auxiliary blower shed.

Activities Performed:

Montgomery Watson Harza (MWH) reported that it continued to operate the groundwater treatment plant (GWTP) at 25 gpm after repairing and reinstalling the failed primary process pump P-104. The GWTP was shut down periodically for routine maintenance. MWH reported that the GWTP shut down following a power failure on the evening of November 25. The plant was brought back online on November 27.

MWH continued to operate the On-Site Containment Area (ONCA) Still Bottoms Pond Area (SBPA) and Off-Site Containment Area (OFCA) in-situ soil vapor extraction (ISVE) systems, processing vapors through thermal oxidizers 1 and 2. Vapors from the ONCA SBPA ISVE system were processed through thermal oxidizer 1 (thermox 1) and those from the OFCA ISVE system were processed through thermox 2.

MWH reported that it activated an additional 14 SVE wells in the OFCA ISVE system on November 24, bringing the total number of wells being used in the OFCA to 28. The recently activated wells are SVE-1, 7, 8, 9, 14, 15, 18, 21, 27, 30, 31, 33, 36, and 37. Flow was confirmed in 11 of the newly activated wells, but not so in 3 others. The two blowers in the OFCA ISVE system are currently operating at 2,000 cubic feet per minute (cfm) back to thermox 2.

The ONCA SBPA ISVE system continues to operate (at 1,000 cfm) with the same group of 12 wells that it has used for a few months. MWH reported that significant flow was observed in only five of these activated wells. MWH reported that the groundwater levels in some wells are higher than previously, possibly influencing the reduced flow in some wells. MWH reported that the SBPA ISVE system is operating with zero ambient air. MWH is considering activating more or a different pattern of SVE wells.

MWH reported that it has not pumped product from the ONCA SBPA ISVE wells for a few months. MWH will prepare a product removal pumping plan/schedule.

MWH reported that Mompar Insulation was onsite on November 23 to insulate the recently installed auxiliary blower shed.

Topics of Concern: None.

Concern Resolution: None.

Upcoming Activities:

- MWH to continue proving out the ONCA SBPA ISVE system wells.
- MWH to continue operating the GWTP and the OFCA and ONCA SBPA ISVE systems.
- MWH to assess results of final laboratory testing of cores of the SBPA final asphalt cover.
- MWH to complete fencing of the SBPA final cover.
- MWH to collect additional soil gas samples to assess possible soil vapor intrusion into the house basement resulting from the smear zone in the South Area plume.
- MWH to reassess its approach to completing the lower aquifer investigation.
- MWH to contact local resident regarding "whining" noise from the treatment system.
- MWH to measure site water levels onsite and in monitoring wells.

Signature: Larry Campbell Date: December 6, 2004

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1 Nov 04

0830 Arrive Onsite - overcast rain cool 52°F

Personnel Onsite

Lee Orosz	MWH
Chad Smith	"
Bill Berg	"
Tim Kirkland	Austgen
Ben Vine	EFS
Billy Barger	"
Shawn Fuller	"
Josh Dutton	"
LM Campbell	BUSPC

0835 Lee Orosz & Chad Smith conducted Kickoff Safety Mtg w/ EFS personnel

0900 EFS started mobilizing to deep aquifer invest. site

1000 EFS started direct push rig to determine thickness of clay layer at bottom of upper aquifer at location LA5

1015 Photo 69-01 looking down at sample from LA5 clay layer

LM Campbell

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1016 Photo 69-02 Looking S at MWH sample tent

1027 Photo 69-03 Looking N at EFS starting to drill HSA hole at LA5 To install Surface Casing.

1040 Photo 69-04 Looking NW @ EFS installing auger to clay layer & Stockpiling soil on plastic for later disposal.

1124 Photo 69-05 Looking NE @ EFS preparing to install steel surface casing at LA5

1245 Photo 69-06 Looking NE at EFS mixing neat cement grout

1300 Photo 69-07 Looking NW at EFS mixing grout - note installed tremie pipe into casing

1330 Photo 69-08 Looking NW at EFS grouting upper casing

1350 Photo 69-09 Looking down at grouted surface casing

1351 Photo 69-10 Looking down on plug in surface casing

1355 EFS cleaning up after completing LA5

LM Campbell

1400 – 1500 EFS took lunch

1530 EFS started installing replacement Piezometer P94

1530 Photo 70-01 looking NW at EFS starting to drive 3" ϕ casing for piez. P94

1550 Photo 70-02 Looking W at prepacked piezometer screen & 1" dia riser PVC being installed in casing

1551 Photo 70-03 Looking W at prepacked piezometer screen & riser pipe

1600 Photo 70-04 Looking SW at EFS installing bentonite chips in annular space ~~between~~ between riser pipe and casing wall

1615 Photo 70-05 looking S at at SVE well 83 showing staining where product spilled from well casing

1620 Photo 70-06 looking S at Yellow stripping painted on asphalt to delineate roadway

Jm Campbell

1625 Photo 70-07 Looking S at installed P94 (inside BW)

1625 EFS in process of installing P93 20' W of P94 (outside BW)

1640 Lee Ovsz informed me of two incidents at site last Fri. Oct 29

1) ACS personnel noted product bubbling out of SVE well 83 and spilling onto ONSA cover. Tim Kirkland shut off ONSA SBPA SVE & blower system & cleaned up spilled product. MWH will attempt to duplicate this & find out the cause

2) IDEM personnel inspected ACS facility re storage of Haz. Waste. Also came to GWTP and asked about haz waste storage. Tim showed them the sludge roll off box area. Inspector unwrapped 1 grill stored there, oil stored & not labelled & no label on Haz Waste Container

1640 Left Site for Day

Jm Campbell

8 NOV 04

0825 Arrive Onsite – Calm
Partly Cloudy, Cool 50°F
Personnel Onsite

Lee Orosz	MWH
Tim Kirkland	Austgen
Chad Smith	MWH
Amy Clare	MWH
Josh Dutton	EFS
Steve McIntire	EFS
Larry Campbell	BUSR

0900 Discussion w/ Lee Orosz
- GWTP & ISVE systems running well. GWTP at 25 gpm, pumping from all sources except RCRA which was shut down because of Lower Aquifer investigation in the area.
- Pumps in MW5C once MW10C were reinstalled 2 wks ago – both now pumping. Needed recalib or replacement of controllers
- Started OFCA ISVE auxiliary blower Thur NOV 4. Now blowing 2000 cfm OFCA ISVE to Thermox 2 ONCA SBPA ISVE 1000 cfm to Thermox 1

JM Campbell

- Foamy Product that bubbled out of top of SBPA ISVE well 83 was about 1 gal & was cleaned up. Well was restarted last week but have had no repeat of this problem. Don't yet know cause.

0930 Observed Lower Aquifer Investigation.
0940 Photo 70-08 Looking SE at MW4 examining sample from 15'-20' LA-8 Taking PID reading of clay layer (middle) w/ sand below (close)
0945 Chad Smith stated that they found 2nd clayey silt layer. Have ether odor in upper aquifer sand, clay layer & intermediate clay layer
0958 Photo 70-09 Looking SE at EFS pulling sample from LA-8
1003 Photo 70-10 Looking NE at Soil sample from 20'-21' @ LA5 showing 2nd clayey layer at 20+'. Ether odor in sand, but not in clay
1020 Photo 70-11 Looking SW at GW ~~Sampling~~ Purging from LA 8 from 17'-20'
1053 Photo 70-12 Looking W at MW4 Sampling GW at LA8 @ 17'-20'
1058 Photo 70-13 Looking NE at line

JM Campbell

of LA well locations showing
~~last~~ most Western well installed (LA9)
because drill rig got stuck and
couldn't access 3 more western wells
1122 Photo 70-14 Looking W at
EFS pulling first soil sample
from LA 4 after driving below
bottom of surface casing @ 16'-21'
Note: Threads in sampler head sheared
off and sampler possibly lost in hole
1130 Chad Smith directed EFS to
move to LA 7 and conduct
soil & GW sampling there. May
try to collect GW sample at
LA 4 later
1145 Photo 70-15 Looking W showing
roll off box used to store soil
cuttings.
1150 Left Site for day

Jm Campbell

18 NOV 04
0840 Arrive Onsite - Overcast
Misty 52°F Calm
Personnel Onsite
Lee Orosz MWH
Mike Lawson Austgen
Tom Kirkland "
Larry Campbell BVSPC
0930 Disc w/ Lee Orosz
Insulation Concepts were onsite
11-17-04 to insulate the new
knockout tank at GWTP.
Walsh & Kelly had been onsite on 11-12-04
to complete some measurements of
SBPA Final Cover
0932 Photo 70-16 Looking N at newly
insulated Knockout Tank
0933 Photo 70-17 Looking W at insulated
knockout Tank and piping at GWTP
1000 Construction Mtg - See pg 100
1030 for minutes
1045 Photo 70-18 Looking SW along
staked line of lower aquifer wells
wells after stepping LA lowest
1047 Photo 70-19 Looking W at

Jm Campbell

Roll off box containing soil cuttings from LA investigation.

1000 Construction Mtg Minutes

Attendees:
Lee Cregg MWH @ site
Larry Campbell BVSPC @ site
Kevin Adler EPA phone
Peter Vast, Rob Adams, &
Chad Smith - MWH phone

H&S - No H&S issues since last mtg. Rob Malone of IDEM inspected site on Oct 22 and found concerns regarding haz. waste sludge roll off box & area. Used oil was stored w/o being labeled. No start collection date on roll off box. Some filter cake on ground. MWH fixed deficiencies & notified IDEM via phone
- MWH held H&S mtg w EPS drillers before start of lower aquifer investigation. MWH used PID & LEL meter during geoprobe work.

JM Campbell

GWTP - Operating at 20 gpm (previously at 28 gpm). At main process pump was down for repair. Expect repaired pump to be reinstalled tomorrow Nov 17.
- MWH performed ongoing maintenance.
- MWH reported both pumps in MW10C and MW56 are working.

Thermox 1 - Working well pulling vapors from OWEA since Nov 4. Last NO shut down @ 1000 cfm. Earlier problem with flame out was repaired some time ago by adjusting air flow.

Thermox 2 - Working well pulling vapor from OFEA @ 2000 cfm. Replacement of air filters caused overheating of unit - but OK now. ISVE wells are same as previously. No problems w/ auxiliary blower shed equipment. Heat exchanger working well.

Knockout Tank - New KO tank near GWTP was installed on Nov 17

Lower Aquifer Invest. - Started Nov 1 and ended Nov 4. Found subsurface geology different than we packed. Did not have correct drill rig or

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proper casing lengths to continue well installation. Surface casing was installed in 7 eastern well locations. Because of rain, could not access Western 3 wells.
Rinse & purge water was contained & disposed of GWTP. Soil cuttings placed in covered roll off box.
Sampled 6 wells below clay layer & found ether similar to conc. previously found at MW10C.
MWH will summarize results & propose a revised work plan - expect in December w/ addl work in March.

Chem Ox - expect validated soil & GW data soon
MWH preparing work plan for addl soil gas, indoor gas & radon sampling at 1062 Rober Rd.

ONEA ISVE wells w/ product - haven't pumped product for last month. MWH to prepare product removal pumping schedule

ONEA Fencing - MWH will add concrete ballast to chain stanchions

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to provide more stability of stanchions

ONEA SVPA Final Cover - MWH received documentation from Walsh & Kelly. MWH expects to issue draft rept in late December.

Look Ahead

- Keep GWTP running
- Keep ISVE systems running
- Measure GW levels in early Dec.
- Winterize GWTP - check heat tracing & all exposed lines.

Next Mtg on Dec 9 @ 10 AM

1030 Mtg over.

1100 left Site for day

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Site: American Chemical Service, Inc.
Proj. #: 46526
Roll: 69 Photo #1
Date: 11-01-04 Time: 1015
Photographer: Larry Campbell
Description: Photo facing down showing sample from LA5 clay layer.

Site: American Chemical Service, Inc.
Proj. #: 46526
Roll: 69 Photo #2
Date: 11-01-04 Time: 1016
Photographer: Larry Campbell
Description: Photo facing south showing MWH sampling tent with EFS and MWH personnel.

Site: American Chemical Service, Inc.
Proj. #: 46526
Roll: 69 Photo #3
Date: 11-01-04 Time: 1027
Photographer: Larry Campbell
Description: Photo facing north showing EFS starting to drill hollow-stem auger hole at LA5 to install surface casing.

Site: American Chemical Service, Inc.
Proj. #: 46526
Roll: 69 Photo #4
Date: 11-01-04 Time: 1040
Photographer: Larry Campbell
Description: Photo facing northwest showing EFS installing auger to clay layer and stockpiling soil cuttings on plastic for later disposal.

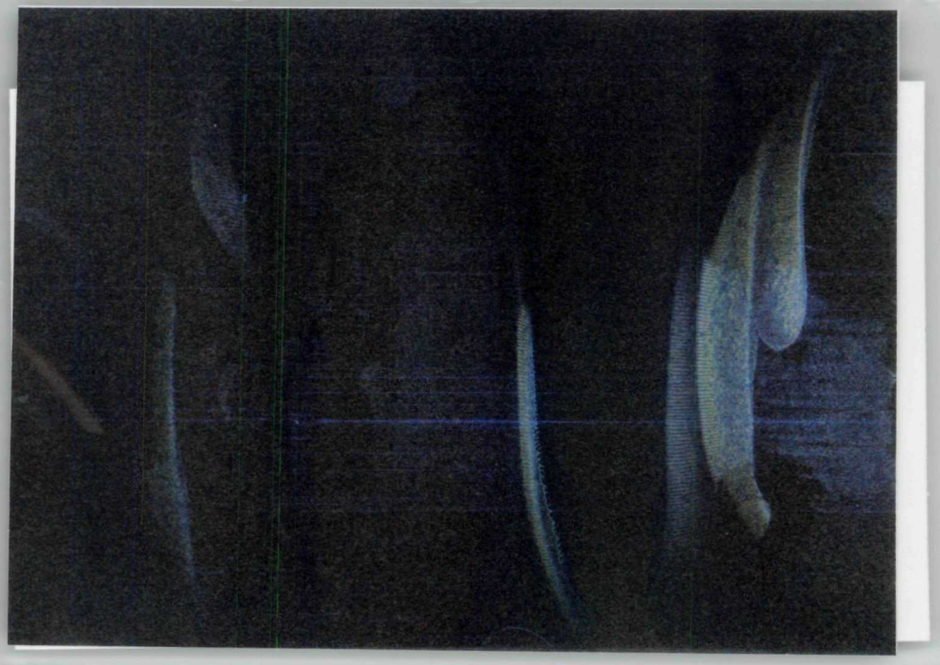
Site: American Chemical Service, Inc.
Proj. #: 46526
Roll: 69 Photo #5
Date: 11-01-04 Time: 1124
Photographer: Larry Campbell
Description: Photo facing northeast showing EFS preparing to install steel surface casing in LA5.

Site: American Chemical Service, Inc.
Proj. #: 46526
Roll: 69 Photo #6
Date: 11-01-04 Time: 1245
Photographer: Larry Campbell
Description: Photo facing northeast showing EFS mixing neat cement grout.

Site: American Chemical Service, Inc.
Proj. #: 46526
Roll: 69 Photo #7
Date: 11-01-04 Time: 1300
Photographer: Larry Campbell
Description: Photo facing northwest showing EFS mixing neat cement grout. Note plastic tremie pipe installed in well casing.

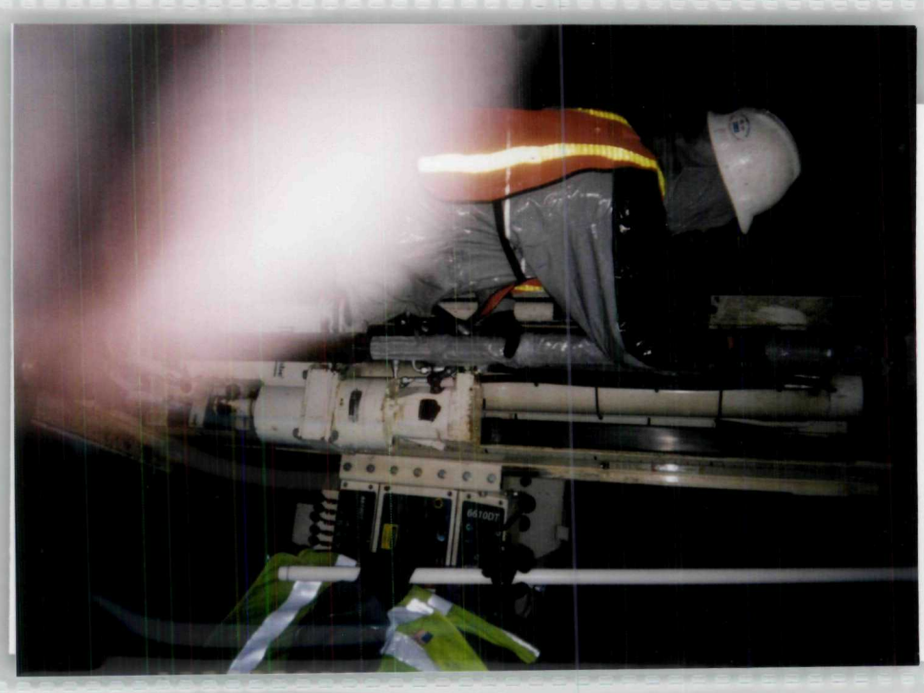
Site: American Chemical Service, Inc.
Proj. #: 46526
Roll: 69 Photo #8
Date: 11-01-04 Time: 1330
Photographer: Larry Campbell
Description: Photo facing northwest showing EFS grouting upper casing into clay layer.

Site: American Chemical Service, Inc.
Proj. #: 46526
Roll: 69 Photo #9
Date: 11-01-04 Time: 1350
Photographer: Larry Campbell
Description: Photo facing down at grouted surface casing at LA5.



Site: American Chemical Service, Inc.
Proj. #: 46526
Roll: 69 Photo #10
Date: 11-01-04 Time: 1351
Photographer: Larry Campbell
Description: Photo facing down showing plug in surface casing. [NOTE Camera got wet and film was damaged.]

Site: American Chemical Service, Inc.
Proj. #: 46526
Roll: 70 Photo #1
Date: 11-01-04 Time: 1530
Photographer: Larry Campbell
Description: Photo facing northwest showing EFS starting to drive 3" dia. casing for replacement piezometer P94.



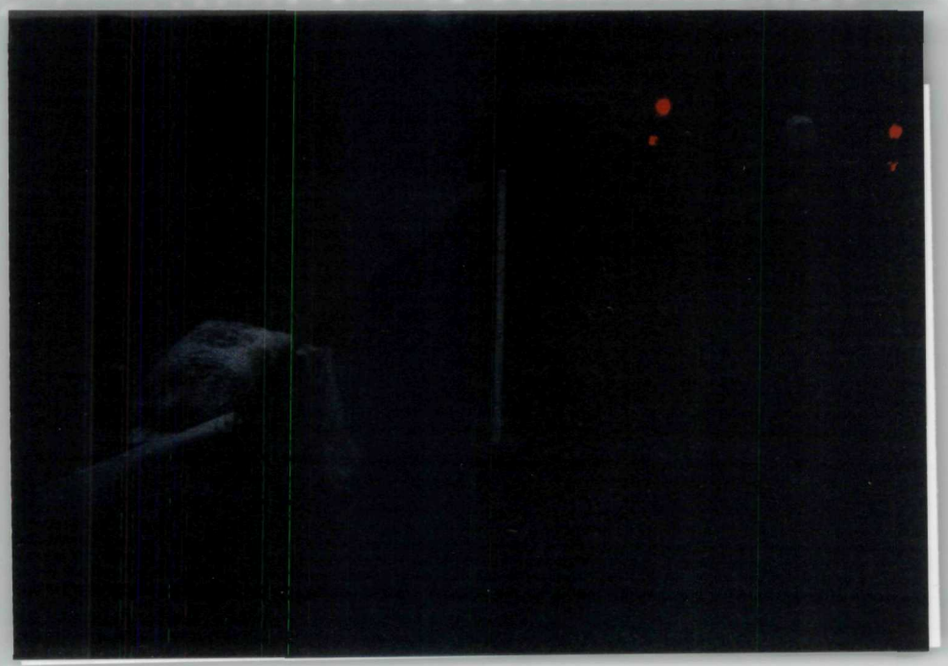
Site: American Chemical Service, Inc.
Proj. #: 46526
Roll: 70 Photo #2
Date: 11-01-04 Time: 1550
Photographer: Larry Campbell
Description: Photo facing west showing EFS installing prepacked piezometer screen and 1" dia. PVC riser in surface casing at P94.

Site: American Chemical Service, Inc.
Proj. #: 46526
Roll: 70 Photo #3
Date: 11-01-04 Time: 1551
Photographer: Larry Campbell
Description: Photo facing west showing prepacked piezometer screen and riser pipe being inserted in surface casing at P94.

Site: American Chemical Service, Inc.
Proj. #: 46526
Roll: 70 Photo #4
Date: 11-01-04 Time: 1600
Photographer: Larry Campbell
Description: Photo facing southwest showing EFS installing bentonite chips in annular space between riser pipe and surface casing at P94.

Site: American Chemical Service, Inc.
Proj. #: 46526
Roll: 70 Photo #5
Date: 11-01-04 Time: 1615
Photographer: Larry Campbell
Description: Photo facing south at SPBA ISVE 83 well pad showing staining (on right side of pad) where product was ejected from well casing.

Site: American Chemical Service, Inc.
Proj. #: 46526
Roll: 70 Photo #6
Date: 11-01-04 Time: 1620
Photographer: Larry Campbell
Description: Photo facing south showing yellow stripping painted on asphalt cap to delineate truck roadway.



Site: American Chemical Service, Inc.
Proj. #: 46526
Roll: 70 Photo #7
Date: 11-01-04 Time: 1625
Photographer: Larry Campbell
Description: Photo facing south at installed piezometer P94 (inside the barrier wall). [Paired piezometer P93 installed 20' west of P93, outside barrier wall.]

Site: American Chemical Service, Inc.
Proj. #: 46526
Roll: 70 Photo #8
Date: 11-08-04 Time: 0940
Photographer: Larry Campbell
Description: Photo facing southeast showing MWH examining sample from 15'-20' from LA8, taking PID readings of clay layer (middle) w/ sand below (foreground).

Site: American Chemical Service, Inc.
Proj. #: 46526
Roll: 70 Photo #9
Date: 11-08-04 Time: 0958
Photographer: Larry Campbell
Description: Photo facing southeast showing EFS pulling soil sample from LA8.

Site: American Chemical Service, Inc.
Proj. #: 46526
Roll: 70 Photo #10
Date: 11-08-04 Time: 1003
Photographer: Larry Campbell
Description: Photo facing northeast showing soil sample from 20'-21' from LA5, showing second clay layer at 20'+. Ether odor in sand, but not in clay.

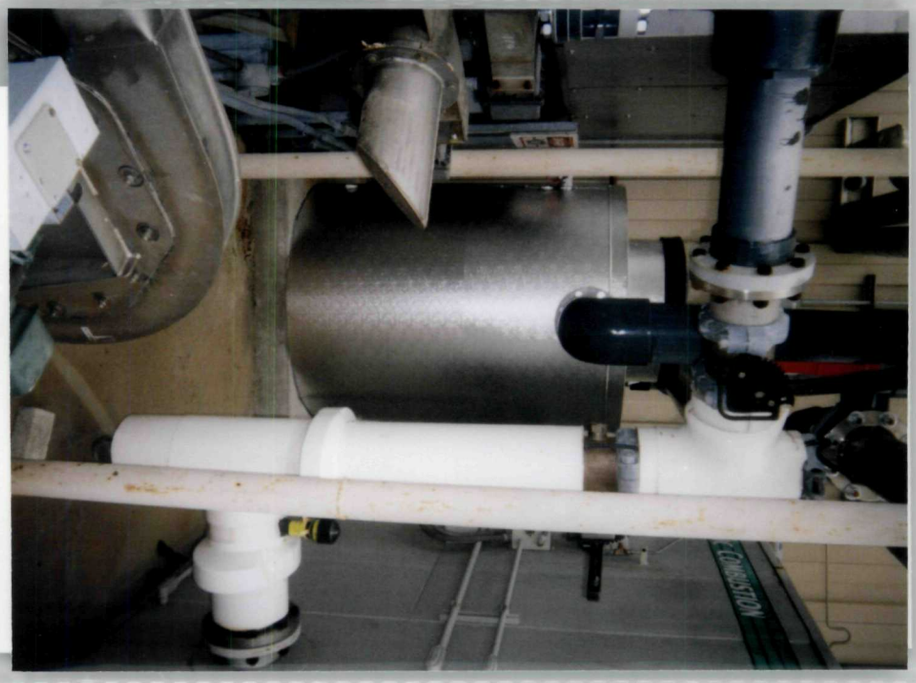
Site: American Chemical Service, Inc.
Proj. #: 46526
Roll: 70 Photo #11
Date: 11-08-04 Time: 1020
Photographer: Larry Campbell
Description: Photo facing southwest showing MWH purging groundwater from LA8 at 17'-20'.

Site: American Chemical Service, Inc.
Proj. #: 46526
Roll: 70 Photo #12
Date: 11-08-04 Time: 1053
Photographer: Larry Campbell
Description: Photo facing west showing MWH sampling groundwater at LA8 from 17'-20'.

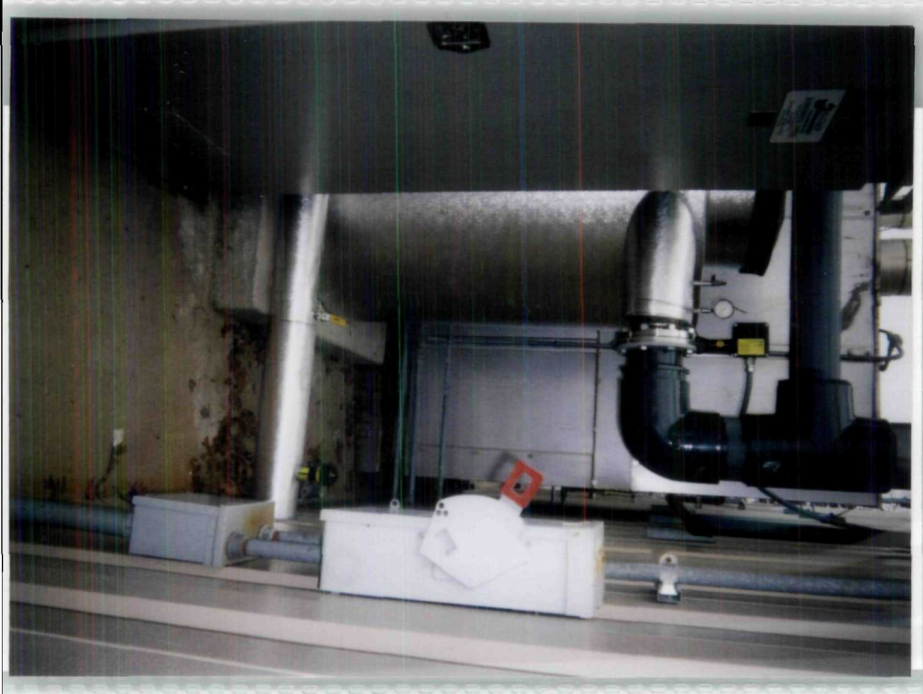
Site: American Chemical Service, Inc.
Proj. #: 46526
Roll: 70 Photo #13
Date: 11-08-04 Time: 1058
Photographer: Larry Campbell
Description: Photo facing northeast showing eastern end of line of lower aquifer well locations. Because rig got stuck, couldn't access the 3 more westerly well locations.

Site: American Chemical Service, Inc.
Proj. #: 46526
Roll: 70 Photo #14
Date: 11-08-04 Time: 1122
Photographer: Larry Campbell
Description: Photo facing west showing EFS pulling first soils sample from LA4 after driving below bottom of surface casing at 16'-21'. Sampler stuck in hole but later recovered.

Site: American Chemical Service, Inc.
Proj. #: 46526
Roll: 70 Photo #15
Date: 11-08-04 Time: 1145
Photographer: Larry Campbell
Description: Photo facing west showing rolloff box used to store lower aquifer soil cuttings.



Site: American Chemical Service, Inc.
Proj. #: 46526
Roll: 70 Photo #16
Date: 11-18-04 Time: 0932
Photographer: Larry Campbell
Description: Photo facing north at newly insulated knockout tank at groundwater treatment plant.



Site: American Chemical Service, Inc.
Proj. #: 46526
Roll: 70 Photo #17
Date: 11-18-04 Time: 0933
Photographer: Larry Campbell
Description: Photo facing west showing insulated knockout tank and piping at the groundwater treatment plant.

Site: American Chemical Service, Inc.
Proj. #: 46526
Roll: 70 Photo #18
Date: 11-18-04 Time: 1045
Photographer: Larry Campbell
Description: Photo facing southwest along staked line of lower aquifer investigation wells after stopping lower aquifer investigation.

Site: American Chemical Service, Inc.
Proj. #: 46526
Roll: 70 Photo #19
Date: 11-18-04 Time: 1047
Photographer: Larry Campbell
Description: Photo facing west showing rolloff box used to collect soil cuttings from lower aquifer investigation.